What is claimed is:

1. A recording medium having a data structure for managing reproduction of multi-path video data recorded on the recording medium, comprising:

5   a data area storing the multi-path video data; and

a navigation information area storing playlists including reproduction information of the multi-path video data,

wherein the playlists are created as many as the number of reproduction paths of the multi-path video data.

10   2. The recording medium of claim 1, wherein each of the playlists is associated with all of data stream clip files pertaining to one path of the multiple reproduction paths.

3. The recording medium of claim 1, wherein each of the playlists has type information to identify whether it is entry

15 playlist or not.

4. The recording medium of claim 1, wherein the playlists include at least one playitem individually, the playitems included in the different playlists refer a same clip file containing common path video data section of the multi-path video data.

20   5. A recording medium having a data structure for managing reproduction of multi-path video data recorded on the recording medium, comprising:

a data area storing the multi-path video data; and

a navigation information area storing a playlist including

25 reproduction information of the multi-path video data,

wherein the playlist includes a plurality of playitems pointing to different video data sections pertaining to different reproduction paths, respectively.

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6. The recording medium of claim 5, wherein the playlist further includes at least one playitem pointing to a clip file containing common path video data section of the multi-path video data.

7. The recording medium of claim 5, wherein each of the playitems has type information to identify whether it is entry playitem or not.

8. A recording medium having a data structure for managing reproduction of multi-path video data recorded on the recording medium, comprising:

a data area storing the multi-path video data; and

a navigation information area storing playlists including reproduction information of the multi-path video data,

wherein the playlists are created as many as the number of path segments constituting the multi-path video data.

9. The recording medium of claim 8, wherein each of the path segments is recorded in a single clip file.

10. The recording medium of claim 8, wherein each of the playlists has type information to identify whether it is entry playlist or not.

11. The recording medium of claim 8, wherein the navigation information area further comprises object information including pre-commands and/or post-commands to be conducted before and/or after each playlist is reproduced.

12. The recording medium of claim 11, wherein single object information is created for the multi-path video data.

13. The recording medium of claim 11, wherein the object information is created for each of the playlists.

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14. The recording medium of claim 13, wherein each object information has type information to identify whether it is entry object or not.

15. A method for recording a data structure for managing reproduction of multi-path video data on a recording medium, comprising:

recording the multi-path video data in a data area on the recording medium; and

recording a plurality of playlists including reproduction information of the multi-path video data in a navigation information area on the recording medium,

wherein the playlists are created as many as the number of reproduction paths of the multi-path video data.

16. A method for recording a data structure for managing reproduction of multi-path video data on a recording medium, comprising:

recording the multi-path video data in a data area on the recording medium; and

recording a playlist including reproduction information of the multi-path video data in a navigation information area on the recording medium,

wherein the playlist includes a plurality of playitems pointing to different video data sections pertaining to different reproduction paths, respectively.

17. A method for recording a data structure for managing reproduction of multi-path video data on a recording medium, comprising:

recording the multi-path video data in a data area on the

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recording medium; and

recording playlists including reproduction information of the multi-path video data in a navigation information area on the recording medium,

5   wherein the playlists are created as many as the number of path segments constituting the multi-path video data.

18. An apparatus for recording a data structure for managing reproduction of multi-path video data on a recording medium, comprising:

10   a drive for driving an optical recording means that records data on the recording medium;

an encoder for encoding the multi-path video data; and

a controller for controlling the drive to record the encoded multi-path video data in a data area on the recording medium and a

15 plurality of playlists including reproduction information of the multi-path video data in a navigation information area on the recording medium, such that the playlists are created as many as the number of reproduction paths of the multi-path video data.

19. An apparatus for recording a data structure for managing

20 reproduction of multi-path video data on a recording medium, comprising:

a drive for driving an optical recording means that records data on the recording medium;

an encoder for encoding the multi-path video data; and

25   a controller for controlling the drive to record the encoded multi-path video data in a data area on the recording medium and a playlist including reproduction information of the multi-path video data in a navigation information area on the recording medium, such

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that the playlist includes a plurality of playitems pointing to different video data sections pertaining to different reproduction paths, respectively.

20. An apparatus for recording a data structure for managing
5 reproduction of multi-path video data on a recording medium, comprising:

a drive for driving an optical recording means that records data on the recording medium;

an encoder for encoding the multi-path video data; and
10   a controller for controlling the drive to record the encoded multi-path video data in a data area on the recording medium and a plurality of playlists including reproduction information of the multi-path video data in a navigation information area on the recording medium, such that the playlists are created as many as the
15 number of path segments constituting the multi-path video data.

21. A method for reproducing a data structure for managing reproduction of multi-path video data recorded on a recording medium, comprising:

reproducing at least one playlist including reproduction
20 information of the multi-path video data from a navigation information area on the recording medium;

selecting one playlist or one playitem among playitems included in the playlist based on a chosen reproduction path; and

reproducing full or a part of one path of the multi-path video
25 data indicated by the selected playlist or playitem.

22. An apparatus for reproducing a data structure for managing reproduction of multi-path video data recorded on a recording medium, comprising:

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a drive for driving an optical reproducing device to reproduce data recorded on the recording medium;

a decoder for presenting the reproduced data; and

a controller for controlling the drive to reproduce at least 5 one playlist including reproduction information of the multi-path video data from a navigation information area on the recording medium, selecting one playlist or one playitem among playitems included in the playlist based on a chosen reproduction path, and controlling the drive to reproduce full or a part of one path of the multi-path 10 video data indicated by the selected playlist or playitem.